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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,969	12/03/2001	Stephen Bresina	2678	7840

530 7590 09/17/2003

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EXAMINER

PHILOGENE, PEDRO

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/004,969

Applicant(s)

BRESINA, STEPHEN

Examiner

Pedro Philogene

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Bresina et al. (6,395,035).

With respect to claim 1, Bresina et al disclose an apparatus for facilitating fusion of adjacent vertebrae, comprising an implant (1) body dimensioned for positioning within an intervertebral space between upper and lower vertebrae to maintain the vertebrae in desired spaced relation to facilitate fusion thereof, the implant body including lower and upper surfaces for engaging respective lower and upper vertebrae, and first and second side wall portions; as best seen in FIGS. 5,6; extending between the upper and lower surfaces, the first and second wall portions being substantially solid, at least one of the first and second side wall portions having a substantially narrow longitudinal slit (8) defined therein arranged to enhance flexibility of the side wall portion.

With respect to claims 2-5,10-13, Bresina et al disclose all the limitations, as set forth in columns 4-6, lines 1-67; and as best seen in FIGS. 1-11.

With respect to claims 14-17, the method steps, as set forth, would have been inherently carried out in the operation of the device, as set forth above.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Heggeness et al (5,514,180).

With respect to claim 20, Heggeness et al discloses a kit for fusion of adjacent vertebra comprising a plurality of implants (60,70,80,90,100), each having an implant body including an upper and a lower surfaces for engaging respective adjacent vertebra and sidewall position extending between the upper and lower surfaces and surrounding an internal cavity having plurality of generally cylindrical internal bores open to the upper and lower surfaces; as best seen in Fig.25; a plurality of bone plugs, as set forth in column 11, lines 40-49, sized to fit into each of the cylindrical internal bores.

With respect to claims 21-22, Heggeness et al disclose all the limitations, as set forth in column 11, lines 40-49 and as best seen in Fig.25.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6,7,18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bresina et al (6,395,035) in view of Heggeness et al. (5,514,180).

With respect to claims 6,7,18,19, it is noted that Bresina et al did not teach of a plurality of the generally cylindrically-shaped internal bores, arranged side by side and

further including bone plug; as claimed by applicant. However, in a similar art, Heggeness et al. (FIG.25) evidences the use of an implant with a plurality of internal bores arranged side by side and including bone plug to facilitate bone growth.

Therefore, given the teaching of Heggeness et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the plurality of internal bores filled with bone plug in the device of Bresina et al to facilitate bone growth.

Claims 8,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bresina et al (6,395,035) in view of Biscup (6,245,108).

With respect to claims 8,9, it is noted that Bresina et al did not teach of a plurality of ridges and grooves on the upper and lower surfaces of the implant; as claimed by applicant. However, in a similar art, Biscup evidences the use of an implant with ridges and grooves on top and bottom surfaces to engage the surface of an adjacent vertebra.

Therefore, given the teaching of Biscup, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate ridges and grooves on the upper and lower surfaces of the device of Bresina et al to engage the surface of an adjacent vertebra.

### ***Response to Amendment***

Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

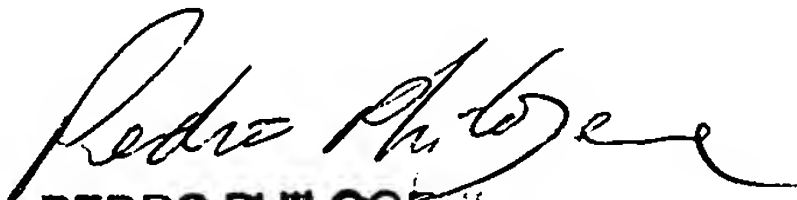
A shortened statutory period for reply to this action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (703) 308-2252. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Pedro Philogene  
September 12, 2003

  
PEDRO PHILOGENE  
PRIMARY EXAMINER